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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,759	08/15/2001	Ganesh Pattabiraman	010353	2072

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

PAN, YUWEN

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 12/01/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,759

Applicant(s)

PATTABIRAMAN ET AL.

Examiner

Yuwen Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6,8. 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: "less", line 2 should be minus according to figure 3 and item 3. Appropriate correction is required.
2. Claim 19 is objected to because of the following informalities: "less", line 3 should be minus according to figure 3 and item 3. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-4,6,7,,13-19,21-27 are rejected under 35 U.S.C. 102(a) as being anticipated by Ito et al (EP001089578A2).

With respect to claim 1, Ito discloses a method for synchronizing a wakeup schedule for a Bluetooth module and a wakeup schedule for a CDMA module in a wireless mobile unit (see column 2 and lines 29-46, see column 4 and lines 39-42), said method comprising steps of:

Determining a next CDMA wakeup time; and synchronizing a new Bluetooth wakeup time to said next CDMA wakeup time when said next CDMA wakeup time is earlier than a next Bluetooth wakeup time (see figure 10 and column 9 and lines 34-43). According to figure 10, the wakeup time of Bluetooth is always after the wake up time of CDMA.

With respect to claim 2, Ito further discloses a step of establishing said next Bluetooth wakeup time after said determining step and before said synchronizing step (see column 9 and lines 33-43).

With respect to claim 3, Ito further discloses steps of determining a current CDMA time and determining a current Bluetooth time (see figure 10).

With respect to claim 4 and 19, Ito further discloses that there is a time interval between two triggering times during CDMA waiting operation (see figure 10 and column 9 and line 47-column 10 and line 1).

With respect to claims 6,7,21,22, Ito further discloses a step of performing a Bluetooth wakeup process and a CDMA process substantially at said new Bluetooth wakeup time and powering on said Bluetooth module and said CDMA module substantially simultaneously so as to reduce said wireless unit's power consumption (see column 2 and lines 47-58).

With respect to claims 13, 24, Ito discloses a wireless mobile unit comprising (see figure 1): a CDMA module configured to perform a CDMA wakeup process at a next CDMA wakeup time (see figure 2 and item 2); and a processor (see figure 2 and item 11) configured to synchronize a new Bluetooth wakeup to said next CDMA wakeup time when said next CDMA wakeup time is earlier than a next Bluetooth wakeup time (see column 5 and lines 17-48).

With respect to claims 14, 15, Ito further discloses that a Bluetooth module (see figure 11 and item 4) configured to perform a Bluetooth wakeup process and said Bluetooth module is configured to perform said Bluetooth wakeup process at said new Bluetooth wakeup time when said next CDMA wakeup time is earlier than said next Bluetooth wakeup time (see figure 9 and column 9 and lines 34-43).

With respect to claims 16-18, Ito further discloses that said CDMA module comprises a CDMA transceiver and a CDMA antenna (see figure 11 and item 2), said CDMA transceiver and said CDMA antenna being configured to receive a pilot signal from a base station so as to synchronize said CDMA module with said base station, said CDMA module is further configured to derive a current CDMA time from said pilot signal (see column 2 and line 28-46, column 9 and lines 15-26), and said Bluetooth module comprises a clock, said clock being configured to track a current Bluetooth (see figure 10 and column 9 and line 44- column 10 and line 1).

With respect to claim 23, Ito further discloses that said wireless mobile unit is a Bluetooth-enabled CDMA cell phone (see column 4 and lines 39-50).

With respect to claim 25, Ito discloses a wireless mobile unit (see figure 1) comprising: a memory means (see figure 11 and item 12); and a means for performing a CDMA wakeup process at a next CDMA wakeup time and for synchronizing a new Bluetooth wakeup time to said next CDMA wakeup time when said next CDMA wakeup time is earlier than a next Bluetooth wakeup time (see figure 11 and item 112, column 10 and lines 27-57).

With respect to claims 26 and 27, Ito discloses a digital processing apparatus, comprising: a memory means for storing digital data (see figure 11 and item 12); and a digital signal processing means for interpreting digital signals to synchronize a wakeup schedule for a Bluetooth module and a wakeup schedule for a CDMA module in a wireless mobile (see figure 11 and item 112, column 10 and lines 27-57) by:

Determining a next CDMA wakeup time; and synchronizing a new Bluetooth wakeup time to said next CDMA wakeup time when said next CDMA wakeup time is earlier than a next

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Bluetooth wakeup time, further said digital signal processing means further interpreting digital signals to establish said next Bluetooth wakeup time after said determining a next CDMA wakeup time and before said synchronizing a new Bluetooth wakeup time (see figure 9 and column 9 and lines 34-43).

Allowable Subject Matter

3. Claims 5 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art of record doesn't disclose a limitation to synchronize new Bluetooth wakeup time to the next CDMA wakeup time if the current Bluetooth time plus said CDMA interval is less than said next Bluetooth time.

4. Claims 8-12 are allowed.

With respect to claim 8, prior art of record discloses a method for synchronizing wakeup time between a Bluetooth device with a CDMA device. Prior of record doesn't disclose a limitation to synchronize new Bluetooth wakeup time to the next CDMA wakeup time if the current Bluetooth time plus said CDMA interval is less than said next Bluetooth time.

With respect to claims 9-12, claims 9-12 are allowed since claims 9-12 are the dependent claim of claim 8.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mayo et al (US006571111B1) discloses method and apparatus for reducing battery power consumption of transceivers in a communications network using an external generated timing signal.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 703-305-7372. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Yuwen Pan
November 24, 2003


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600